REMARKS

Claims 1 and 15 are amended to recite that a computer receiving a synopsis container renders a synopsis rather than a large data set. Support for this amendment is found in the specification as filed, at least at ¶ 0023. Claims 10 and 14 are amended to recite outputting data formatted as a data structure rather than outputting a data structure. No new matter is added. Claims 1-16 are pending, and are now in condition for allowance.

Drawing Objections

The Examiner maintained objections to the drawings, stating that "the claims 1-9 and 15-16 must be shown or the features canceled from the claims." Claims 1 and 15 recite four method steps, which are depicted in Figure 6. Claim 15 recites a computer readable medium, which is depicted in Figure 1. Accordingly, the claims are depicted in the drawings, and the drawing objection must be withdrawn.

35 U.S.C. § 112

The amendments to claims 10 and 14 moot the 35 U.S.C. § 112 rejections of these claims.

The Examiner maintained the rejection of claim 11 under 35 U.S.C. § 112, stating that neither the specification nor the drawings indicate any flag whether to output a large data set. Paragraph 0019 states, "The synopsis container may additionally contain additional elements, such as a flag indicating whether or not the large data set is to be displayed." Paragraph 0021 states, "A flag, such as the READ_CHILDREN attribute 82 may be assigned a value indicating whether or not the accompanying large data set items are to be displayed." Paragraph 0022 states, "Because the READ_CHILDREN flag 82 was set to false, the table information 70 is not displayed in Figure 5." These statements provide sufficient support for the recitation of claim 11.

The Examiner stated, "Applicant is referring to the program code whereas the patents are not given for software and do not read or consider the program code or instructions." First,

whether patents are issued for software or not is irrelevant to the sufficiency of disclosure of the specification and drawings. "The function of the written description requirement is to ensure that the inventor had possession of, as of the filing date of the application relied on, the specific subject matter later claimed by him or her; how the specification accomplishes this is not material." *In re Herschler*, 591 F.2d 693, 700-01 (CCPA 1979), MPEP § 2161.01 I (emphasis added). "An adequate written description of the invention may be shown by **any description of sufficient, relevant, identifying characteristics** so long as a person skilled in the art would recognize that the inventor had possession of the claimed invention." *See, e.g., Purdue Pharma L.P. v. Faulding Inc.*, 230 F.3d 1320, 1323 (Fed. Cir. 2000), MPEP § 2163 III A 3 (a) (emphasis added). "An applicant shows possession of the claimed invention by describing the claimed invention with all of its limitations using such descriptive means as words, structures, figures, diagrams, and formulas that fully set forth the claimed invention." *Lockwood v. American Airlines, Inc.*, 107 F.3d 1565, 1572 (Fed. Cir. 1997), MPEP § 2163.02. Nothing in the patent law precludes satisfaction of the written description requirement by reference to program code or instructions.

Second, none of the statements in the specification cited above are in "program code or instructions." Rather, they are English language prose descriptions of a flag indicating whether or not a large data set in a synopsis container is to be displayed. The written description as filed fully supports claim 11, and the § 112 objection must be withdrawn.

The Examiner rejected claims 12 and 13, stating "applicant is claiming a data type definition statement." As describe at ¶ 0020, the word CONTAINER is an HTML tag. Those of skill in the software arts know that a particular keyword used in an HTML tag is not a data type definition statement. As described at Wikipedia (http://en.wikipedia.org/wiki/Data_type):

> In programming languages a data type defines a set of values and the allowable operations on those values. . . . Almost all programming languages explicitly include the notion of data type, though different languages may use different terminology. Common data types in

programming languages include those that represent integers, floating
point numbers, and characters, and a language may support many more.

The Hypertext Markup Language (HTML) is not a programming language. HTML is a markup

language – that is, a set of embedded marks, or tags, that control the appearance of a

document when rendered by a printer, web browser, or the like. As described at Wikipedia

(http://en.wikipedia.org/wiki/Html):

> [The] Hypertext Markup Language is the predominant markup language for
> web pages. It provides a means to describe the structure of text-based
> information in a document — by denoting certain text as headings,
> paragraphs, lists, and so on — and to supplement that text with interactive
> forms, embedded images, and other objects.

For at least the reason that a term selected for an HTML tag is not a data type definition

statement, the § 112 rejection of claims 12 and 13 is improper and must be withdrawn.

35 U.S.C. § 101

The Examiner rejected claims 1-16 under 35 U.S.C. § 101 as being directed to a

computer program *per se*. In particular, the Examiner stated, "Independent claims 1, 10, 15 are

claiming a computer program *per se* and <u>non</u>functional descriptive material consisting of data

structures and computer programs, which impart functionality when employed as a computer

component." (Emphasis added). This description is the definition of <u>functional</u> descriptive

material, not nonfunctional. "'Nonfunctional descriptive material' includes but is not limited to

music, literary works, and a compilation or mere arrangement of data." MPEP § 2106.01

"Both types of 'descriptive material' [that is, both functional and nonfunctional] are

nonstatutory when claimed as descriptive material *per se*, 33 F.3d at 1360. When <u>functional</u>

descriptive material is recorded on some <u>computer-readable medium</u>, it becomes structurally

and functionally interrelated to the medium and <u>will be statutory</u> in most cases since use of

technology permits the function of the descriptive material to be realized." *Id* (emphasis added).

"<u>Only</u> when the claimed invention taken as a whole is directed to a mere program listing, i.e., to

only its description or expression, is it descriptive material *per se* and hence nonstatutory."

MPEP § 2106.01 I (emphasis added).

None of claims 1, 10, or 15 recite "a mere program listing." Claim 1 is directed to a

method of synopsizing large data sets to facilitate the use of an accessibility system, and recites

functional method steps. Claim 10 is directed to a computer readable medium including one or

more computer programs operative to cause a computer to perform the steps of generating and

formatting data in a specific manner, and outputting the data formatted as a markup language

data structure. Claim 15 is directed to a computer readable medium including one or more

computer programs operative to cause a computer to perform the functional method steps

recited in claim 1.

Another test for § 101 subject matter eligibility of inventions implemented in software is

that a claim is statutory if a practical application of the claimed subject matter produces a useful,

concrete, and tangible result.

> [T]he examiner shall review the claim to determine if the claim provides a
> practical application that produces a useful, tangible and concrete result. In
> determining whether the claim is for a "practical application," the focus is
> not on whether the steps taken to achieve a particular result are useful,
> tangible and concrete, but rather that the final result achieved by the
> claimed invention is "useful, tangible and concrete."

Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility

IV.C.2.b. (2005). Claims 1 and 15 recite, "transmitting said synopsis container to a computer

having an accessibility system, the synopsis container operative to cause the accessibility

system to output the synopsis of said large data set." Claim 10 recites, "outputting data

formatted as a markup language data structure, the data synopsizing the large data set and

operative to cause a computer having an accessibility system to output the synopsis of said

large data set." The final result achieved by the inventions of claims 1, 10, and 15 is useful,

concrete, and tangible: data formatted as a data structure operative to cause a computer having

an accessibility system to output a synopsis of a large data set, in lieu of or in addition to the

large data set itself. As described in the specification, such a data structure and its operation in computers that recognize it – those having an accessibility system such as a screen reader – provides the useful result of summarizing a large data set for, e.g., visually impaired persons.

The Examiner cited to In Re Comiskey, 499 F.3d 1365 (Fed. Cir. 2007). That case is inapposite. First, the court notes, "claims 1 and 32 do not reference, and the parties agree that these claims do not require, the use of a mechanical device such as a computer." Id., at 1369. The court then concludes:

> Comiskey's independent claims 1 and 32 claim the mental process of resolving a legal dispute between two parties by the decision of a human arbitrator. They . . . claim the use of mental processes to resolve a legal dispute. Thus, like the claims that the Supreme Court found unpatentable in Benson and Flook and the claims found unpatentable in our own cases, Comiskey's independent claims 1 and 32 seek to patent the use of human intelligence in and of itself. Like the efforts to patent "a novel way of conducting auctions" which Schrader found to be directed to an abstract idea itself rather than a statutory category, Comiskey's independent claims 1 and 32 describe an allegedly novel way of requiring and conducting arbitration and are unpatentable.

Id., at 1379. There can be no serious contention that claims 1, 10, or 15 attempt to claim a purely mental process or "the use of human intelligence in and of itself." Claims 10 and 15 are expressly directed to a computer-readable medium, and thus have utility only in conjunction with a computer. Claim 1 recites generating a synopsis container, and "transmitting said synopsis container to a computer having an accessibility system." Applicants' claims are thus necessarily tied to a computer, and In Re Comiskey is inapposite.

For at least the reasons discussed above, the § 101 rejections of claims 1-16 are improper and must be withdrawn.

35 U.S.C. § 103

The Examiner maintained the rejection of claims 1-8 and 10-15 under 35 U.S.C. § 103, stating, "Ramaswamy does teach, generating a synopsis of a large data [sic] as 'identifying a predetermined number of outliers of interest in a large data set.'" As Applicants explained in the

Responses of March 28 and August 9, 2007, "outliers," as Ramaswamy defines the term, is the opposite of a synopsis of a data set – it is a collection of anomalous data points. "[T]he ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005) (*en banc*). The ordinary and customary meaning of a term may be evidenced by a variety of sources, including "the words of the claims themselves, the remainder of the specification, the prosecution history, and extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art." *Phillips v. AWH Corp.*, 415 F.3d at 1314.

Synopsis is defined at paragraph 0019, "The synopsis container additionally contains a summary or synopsis of the large data set." A summary is "A presentation of the substance of a body of material in a condensed form or by reducing it to its main points," (American Heritage, via *answers.com*). Ramaswamy defines outliers as "data points in a data set that are dissimilar from the remaining points in the set." col. 1, lines 11-12. A collection of dissimilar points is not "the substance of a body of material . . . by reducing it to its main points." Main points and dissimilar points are not synonymous; they are opposites. No one of skill in the art would equate a synopsis or summary of a large data set to a collection of outlier points.

The Examiner stated, "a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art." Claim 1 recites, "generating a synopsis of said large data set" and "formatting said synopsis of said large data set in a synopsis container that includes said large data set and said synopsis of said large data set." Nothing in claim 1 is an "intended use" of the claimed invention. The method steps of generating a synopsis, and formatting the synopsis in a synopsis container that includes the data set and the synopsis, are limitations of the claim which must be taught or suggested by the prior art to

establish a *prima facie* case of obviousness. They are not intended uses of the claimed invention. Ramaswamy does not teach or suggest generating a synopsis of a large data set, or formatting the synopsis in a synopsis container that includes the large data set and the synopsis thereof. For at least this reason, the § 103 rejections must be withdrawn.

De Boor does not teach or suggest any claimed limitation for which it is cited, including any accessibility functionality such as a screen reader. The Examiner repeated, "De Boor does teach the screen reader as agreed by the applicant." As clearly stated in the Response of August 9, 2007, Applicants have agreed to no such thing. Applicants emphatically state that De Boor fails to teach or suggest a screen reader, or any other accessibility functionality. De Boor discloses HTML extensions that facilitate the display of web pages on the small screens of wireless communication devices (Abstract). De Boor is completely silent as to a screen reader or any other accessibility system. For at least this reason, the combination of Ramaswamy and De Boor fails to establish a *prima facie* case of obviousness, and the § 103 rejections must be withdrawn.
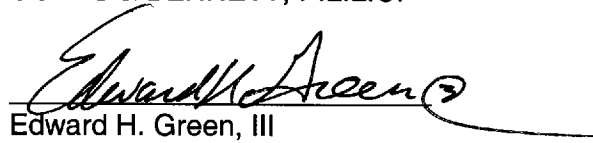
The Examiner stated, "the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious." This statement makes no sense. The Examiner has not identified any alleged advantage – presumably one or more claimed limitations – that would flow naturally from following any suggestion of De Boor. De Boor does not teach or suggest formatting a synopsis of a large data set along with the data set itself into a synopsis container data structure. De Boor does not teach or suggest any computer having an accessibility system such as a screen reader, and it does not teach or suggest transmitting the synopsis container to such a computer. For at least these additional reasons, the combination of Ramaswamy and De Boor fails to establish a *prima facie* case of obviousness, and the § 103 rejections must be withdrawn.

Conclusion

All pending claims, as amended herein, are fully supported by the written description,

define patentable subject matter, and are patently nonobvious over the art of record.

Accordingly, prompt allowance of all pending claims is hereby respectfully requested.

Respectfully submitted,

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